ABSTRACT OF THE DISCLOSURE

An adjustable fuel delivery regulation assembly is provided which can be disposed within a direct oxidation fuel cell system, or the fuel reservoir or fuel tank that supplies such a system. One embodiment of the fuel delivery regulation assembly is a shutter assembly, which includes two correspondingly perforated components. The two components can be positioned relative to one another such that the apertures in each component are aligned in certain ways. In an open position, the apertures are substantially fully aligned to permit full fuel flow. In a closed position, the apertures are offset such that there is no opening; thereby fuel flow is restricted. Intermediate positions allow adjustments in the amount of fuel flow proportional to the size of the openings. In accordance with another embodiment of the invention, a set of rotatably mounted slotted rods is inserted into a housing through which fuel can flow through openings in the housing. When the rods are rotated to a first position, the slots in the rods are aligned with the openings in the housing. When the rods are rotated to a closed position, the slots are not lined up with the openings, and fuel flow is thereby restricted. Intermediate positions allow controlled fuel delivery. A louvered assembly is also provided. Automatic and manual control systems for the adjustment of the positioning of the various components in the fuel delivery regulation assemblies are also provided.

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